Indeed, it is asserted that the discussion concerning claim language arose when the Examiner alleged that a new, previously non-cited reference, US Patent 6,266,039 to Aoki, teaches the slanted flicker. That is, the Examiner alleged that Aoki Figures 11 and 12 clearly show the slanted flicker of the present invention. Applicant's representative did remark that, if these figures showing the slanted polarities are teaching the present invention techniques, then claim language clarification may be required, depending upon an understanding of these figures and a formal rejection based on this new reference.

It was understood by Applicant's representative that the next Office Action (e.g., subsequent to the interview dated July 1, 2003) due as a response to the Amendment Under 37 CFR §1.111 filed on June 11, 2003, would include a new rejection based on the newly-discovered Aoki.

It is noted that no such new rejection is included in the Office Action dated August 27, 2003, and that, upon closer scrutiny of Aoki, Figures 11 and 12 relate to polarities during a precharge period, rather than the data signal period. Thus, without a formal rejection based on Aoki, it would seem that the Examiner's allegations during the personal interview concerning Aoki are unfounded.

Entry of this Response is proper under 37 CFR §1.116, since no new claims are presented and no claim amendments are made that could be construed as raising new issues. It is also submitted that the Examiner's statements made in the latest Office Action require clarification/correction on the record. It is also submitted that the Examiner's Response to the Applicant's Arguments on page 7 of the Office Action do not reasonably allow the rejection currently of record to be considered a *prima facie* rejection under 35 USC §103(a), as explained below.

It is further noted that, notwithstanding any claim amendments made heretofore, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

It is also noted that the claim amendments to date are not intended to differentiate over the prior art of record or any other reason related to patentability. As pointed out in this and previous responses to the office actions, it is submitted that one of ordinary skill in the art would not at all agree with the Examiner's interpretation of the prior art or with the Examiner's urged combination of references, when the combination would thereby change the principle of operation of the primary reference or destroy a feature clearly described therein.

Claims 1-54 are all of the claims pending in the present Application. Claims 53 and 54 stand rejected under 35 USC §112, first paragraph, as failing the written description requirement. Claims 1-52 stand rejected under 35 USC §103(a) as unpatentable over Applicant's Admitted Prior Art (APA), further in view of US Patent 5,689,282 to Wolfs et al.

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

As described and claimed, for example by claim 1, the present invention addresses a method for driving a liquid crystal display in which a liquid crystal cell is mounted at an intersection of each of a plurality of scanning electrodes placed at specified intervals in a row direction and each of a plurality of signal electrodes placed at specified intervals in a column direction, by sequentially feeding scanning signals to the plurality of scanning electrodes and by sequentially feeding data signals to the plurality of signal electrodes. A polarity of each of the data signals is reversed for every 2n (n is a natural number) pieces of the scanning

electrodes. Data signals are concurrently reversed for every other signal electrode in the liquid crystal display. The data signals having the reversed polarity are sequentially fed to each of the corresponding signal electrodes.

This concurrent polarity reversal in both the horizontal and vertical dimensions cause the flicker to occur at a slant, rather than vertically or horizontally, as in the prior art of record. The slant flicker is less noticeable to the observer. Therefore, flicker is reduced.

The advantages provided by claimed combination of the present invention include the following: reduction of cost; reduction of monochromatic flicker and flicker for display of images with non-white colors; and capability to minimize flicker over the entire screen, thereby preventing image persistence and allowing application to high-definition displays and larger displays.

II. THE 35 USC §112, FIRST PARAGRAPH, REJECTION

Claims 53 and 54 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner alleges that these "... *claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.*"

More specifically, the Examiner alleges that "*first uniform interval and second uniform interval, uniform reversal and concurrent uniform intervals (claim 53) first predetermined uniform interval, second predetermined uniform interval and a combination of uniform polarity reversal*" has no support in the specification.

Applicant disagrees.

First, it is submitted that patent protection differs from copyright protection in that a patent attempts to protect the concept, whereas copyright protection would be used for attempting to protect the specific, verbatim choice of wording that describes the concept.

Second, it is submitted that MPEP §2163 II.A.3.(b) describes the evaluation technique appropriate for this rejection: "*To comply with the written description requirement of 35 U.S.C. 112, para. 1, ... each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure.*"

In response, Applicant submits that these claim limitations are clearly visible in Figures 6A, 6B, 8A, and 8B. Applicant additionally directs the Examiner's attention to the paragraph at lines 2-7 on page 30 of the specification, in which paragraph is clearly described the concept of having various predetermined uniform intervals.

Other locations in the specification in which is described the periodic reversal are the following: lines 8-13 on page 21, lines 4 of page 22 through line 12 of page 23, lines 1-13 of page 26, and line 18 of page 26 through line 13 of page 28.

Moreover, polarity reversal is clearly shown in the polarity reversal circuit shown in Figure 5 and in the timing diagrams shown in Figures 1, 7, 9, and 10.

Therefore, in spite of the Examiner's allegations to the contrary, it can hardly be stated that the originally-filed specification fails to support the limitations of claims 53 and 54 and that the ordinary skilled artisan would not have known that the inventor had possession of the claimed subject matter.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTION

The Examiner alleges that the present invention, as defined by claims 1-52, is rendered obvious by the Applicant's Admitted Prior Art (APA), further in view of US Patent 5,689,282 to Wolfs et al. Applicant has already stated how the rejections of record do not meet the Examiner's initial burden for a *prima facie* rejection. The Examiner's response on page 7 of the Office Action do not in any way clarify or attempt to correct these deficiencies.

Nor does the Examiner's reliance on *In re Van Geuns* in any way relieve the Examiner's burden to clarify/correct these deficiencies. That is, there is no rationale for Applicant to add as descriptive claim limitations the wording of Applicant's arguments, when it is the rejection that is *per se* deficient.

Again, summarized for the record, the following deficiencies of the rejection currently of record were previously identified.

The Examiner alleges that the present invention, as defined by claims 1-52, is rendered obvious by the Applicant's Admitted Prior Art (APA), further in view of US Patent 5,689,282 to Wolfs et al. The Examiner is understood as conceding that the APA fails to teach or suggest a "circuit for reversing a polarity of each of the data signals for every 2n piece[s] of the scanning electrodes and for every the signal electrode in the liquid crystal display."

To overcome this alleged deficiency in the APA, the Examiner relies on Wolfs and alleges that Wolfs "discloses a display device having a row selection circuit 13 that can reverse a polarity of the data signals for every 2 rows or n rows (double line inversion [i.e., n = 2])(see Fig. 3)."

Applicant respectfully submits that the rejection of record suggests that the Examiner is somewhat confused about the significance of the present invention and how it differs from

the APA.

The APA already incorporates a polarity reversal scheme to reduce flicker and that merely superimposing another scheme, such as shown in Wolfs, onto that of the APA would totally destroy the scheme in the APA. There is clearly no need to do so, thereby clearly evidencing the Examiner's use of impermissable hindsight reconstruction.

Assuming the Examiner's analysis of the difference between the APA and the claimed invention, the initial burden of the Examiner for a proper rejection under 35 USC §103(a) is to provide a motivation why one of ordinary skill in the art would want to modify the scheme already incorporated in the APA so that it reads upon the claimed invention.

The rejection does not at all address the superimposition of one scheme onto another. The motivation in the rejection is merely wording taken out-of-context from Wolfs and would not, to one of ordinary skill in the art, satisfy the Examiner's initial burden to explain why the polarity scheme of APA should even be replaced or modified. Moreover, there is no evidence that APA has the problem addressed by Wolfs.

The Examiner seems to forget that Wolfs actually teaches a technique that overcomes these horizontal stripes. Thus, if anything, Wolfs actually teaches against using a horizontal-row-inversion technique, since Wolfs itself clearly teaches that such inversion creates horizontal stripes that must be overcome.

A similar argument applies for the second APA shown in Figures 14A/14B, in that the superimposition of Wolfs onto this existing polarity reversal scheme would totally destroy the existing method of reducing flicker, as described beginning at line 28 of page 5. That is, the Examiner would merely introduce the horizontal stripes described in Wolfs at lines 34-37 of column 1.

Thus, the combination of Wolfs into either the first APA or the second APA will destroy the respective scheme that is already used to reduce flicker and would additionally introduce the horizontal stripes that Wolfs in fact attempts to remove.

For this reason alone, this urged combination is improper under the guidelines of MPEP 2143.01 ("The mere fact that reference can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.")
crystal display."

Therefore, claims 1, 13, 25, 37, 49, 51, 53, and 54 are clearly patentable over ARA. Claims 2-6, 14-18, 26-30, and 38-42 would also be patentable, if for no reason other than dependency.

Relative to the rejection for claims 7, 31, and 50, the description on page 5 of the specification, which is the APA description that the Examiner relies upon, does not in any way describe a waveform covering four consecutive scanning periods characterized by two polarities and four potentials. The Examiner's initial burden would be, as a minimum, to place on record the precise wording on this page that he considers to correspond to the claim limitations.

To assist the Examiner's focus for this evaluation for the record, at least the following deficiency would exist from the description at lines 4-27 of page 5: the claims require four

different potentials in a polarity reversing scheme. The description on page 5 may arguably have four time intervals and two polarities but there is no suggestion of using four potentials, as clearly required in the claim language.

Therefore, claims 7, 31, and 50 are fully patentable over APA, and claims 8-12 and 32-36 are patentable, if for no reason other than dependency.

Finally, Applicant also respectfully disagrees that the rejection of record meets the burden of a *prima facie* rejection under 35 USC §103 for claims 19, 43, and 52.

First, the rejection has the same problem as described for attempting to combine Wolfs with APA. Second, even assuming the Examiner's description of Wolfs is correct, this description is not being claimed. The plain language requires that the waveform consists of four consecutive scanning periods, and that each of the four consecutive scanning periods have a specific potential.

In contrast, the waveform shown in Wolfs Figure 6 is not four consecutive scanning periods and does not contain the sequence of potentials described in the claim limitations. It is irrelevant that the waveform contains whatever else the Examiner points out, since the Examiner's description is not being claimed.

Therefore, claims 19, 43, and 52 are fully patentable over APA, and claims 20-24 and 44-48 are patentable, if for no reason other than dependency.

For the reasons above, the claimed invention is fully patentable over the cited prior art.

Further, the other prior art of record has been reviewed, but it too, even in combination with APA and Wolfs, fails to teach or suggest the claimed invention.

IV. FORMAL MATTERS AND CONCLUSION

The Examiner also objected to the drawings as failing to show every feature of claims 53. The Examiner is understood as alleging that no figure shows the features described by the limitation of this claim. However, Applicant submits that the Examiner is clearly incorrect in this allegation, since, to one of ordinary skill in the art, Figures 6A, 6B, 8A, and 8B very clearly show the periodic intervals in the horizontal and vertical dimensions.

As best understood, the Examiner's position is that every claim word must have a corresponding label on a figure. However, such interpretation would expand the plain language meaning of 37 CFR §1.83(a): "The drawing in a nonprovisional application must show every feature of the invention specified in the claims." There is no requirement that every claim word have a corresponding label, as the Examiner is understood to require.

Because Figures 6A, 6B, 8A, and 8B clearly show the periodic intervals, and because the timing diagrams shown in Figures 1, 7, 9, and 10 clearly show periodic reversals, Applicant submits that the existing drawings do indeed show the claim limitations described in claim 53. Therefore, Applicant requests that the Examiner reconsider and withdraw this objection to the drawings.

In view of the foregoing, Applicant submits that claims 1-54, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 12/29/03

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CERTIFICATION OF TRANSMISSION

I certify that I transmitted via facsimile to (703) 872-9306 this Request for Reconsideration Under 37 CFR §1.116 to Examiner D. Dinh on December 29, 2003.

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